Panasonic

42-inch Class FULL HD LCD Display

TH-42LF20U

Product specification (design and specification subject to change without notice)

■DISPLAY PANEL

Screen Size (Diagonal)	42.0-inch
Aspect ratio	16:9
Effective Display Area (W x H)	36.6" x 20.6" (930 x 523 mm)
Number of pixels (H x V)	1920 x 1080 pixels
Brightness (Typ)	700 cd/㎡
Contrast Ratio	1200:1
Response Time	9 ms (G to G)
Viewing Angle (Horizontal/Vertical)	178˚/178˚
Operating Life	50,000 hours

■CONNECTION TERMINAL

VIDEO IN	BNC x 1	1.0 V p-p (75Ω)	
S-VIDEO IN	Mini DIN 4 Pin x 1	Y:1.0V p-p (75Ω), C: 0.286V p-p (75Ω)	
AUDIO IN (VIDEO, S-VIDEO)	RCA Pin jack (L/R) x 1 set	0.5 V rms	
HDMI IN	HDMI TYPE A connector x 2		
COMPONENT/RGB IN	BNC x 3	G/Y	: with sync 1.0 V p-p (75Ω)
		$B/P_B/C_B$	: 0.7 V p-p (75Ω)
		$R/P_R/C_R$	: 0.7 V p-p (75Ω)
AUDIO IN	RCA Pin jack (L/R) x 1 set	0.5 V rms	
DVI-D IN	DVI-D 24 Pin (HDCP compatible) x 1		
PC IN	MINI D-sub 15 Pin x1(Female) Plug & Play (VESA DDC 2B)	G	: with sync 1.0 V p-p (75Ω) : without sync 0.7 V p-p (75Ω)
		B, R	: 0.7 V p-p (75Ω)
		HD/VD	: 1.0~5.0 V p-p (high impedance)
AUDIO IN (DVI-D, PC)	M3 jack x 1	0.5V rms	
SERIAL	D-sub 9 Pin x 1 (Male) (EXTERNAL CONTROL TERMINAL), RS-232C Compatible		

■ELECTRICAL

Power Requirements	110-127V AC, 50Hz/60Hz
Rated Power Consumption	250W
On Mode Average Power Consumption*	173 W (ENERGY STAR Displays 5.0)
Power off condition	0.1W
Stand-by condition	0.1W

*Based on IEC 62087 Ed.2 measurement method.

■AUDIO

Built-in Speakers	10W [5W + 5W] (10%THD)

■MECHANICAL

Dimemsions (W×H×D)	38.2" x 22.1" x 4.0" (968 x 561 x 101 mm)
Bezel Width	0.72" (18.3 mm)
Carton Dimensions (W×H×D)	44" x 28" x 9" (1099 x 707 x 210 mm)
Weight	approx. 39.0 lbs. (18.0 kg)
Gross weight	approx. 48.4s lbs. (22.0 kg)
Cabinet Color	Black
VESA mount	15.8" x 15.8" (400 x 400 mm) (Installed by: M6 screws/ Screw hole depth 0.46"(11.4 mm))

■ENVIRONMENTAL

Operating environment	Temperature	: 32˚F to 104˚F (0 ℃ to 40 ℃)
	Humidity	: 20% to 80% (Non condensation)
Storage environment	Temperature	: -4˚F to 140˚F (-20℃ to 60 ℃)
	Humidity	: 20% to 90% (Non condensation)

■STANDARD (CERTIFICATIONS)

SAFETY REGULATIONS	UL60065 7th ed., CAN/CSA-22.2No60065:03, NOM approval
RADIATION REGULATIONS	FCC Part 15 Class-B, ICES-003, NOM approval

■REMOTE CONTROL TRANSMITTER

Power Requirements	DC 3V (2 x AA Size batteries)
Operation distance	approx. 23 ft (7m) in front of plasma display
Weight	approx. 3.5 oz (100g) including batteries

■INCLUDED ACCESSORIES

- AC cord - Operating instruction book - Remote control transmitter - Batteries - CD-ROM (operating instruction)

UPC Code	885170005051

© Panasonic Corporation 2011

MAIN FEATURE

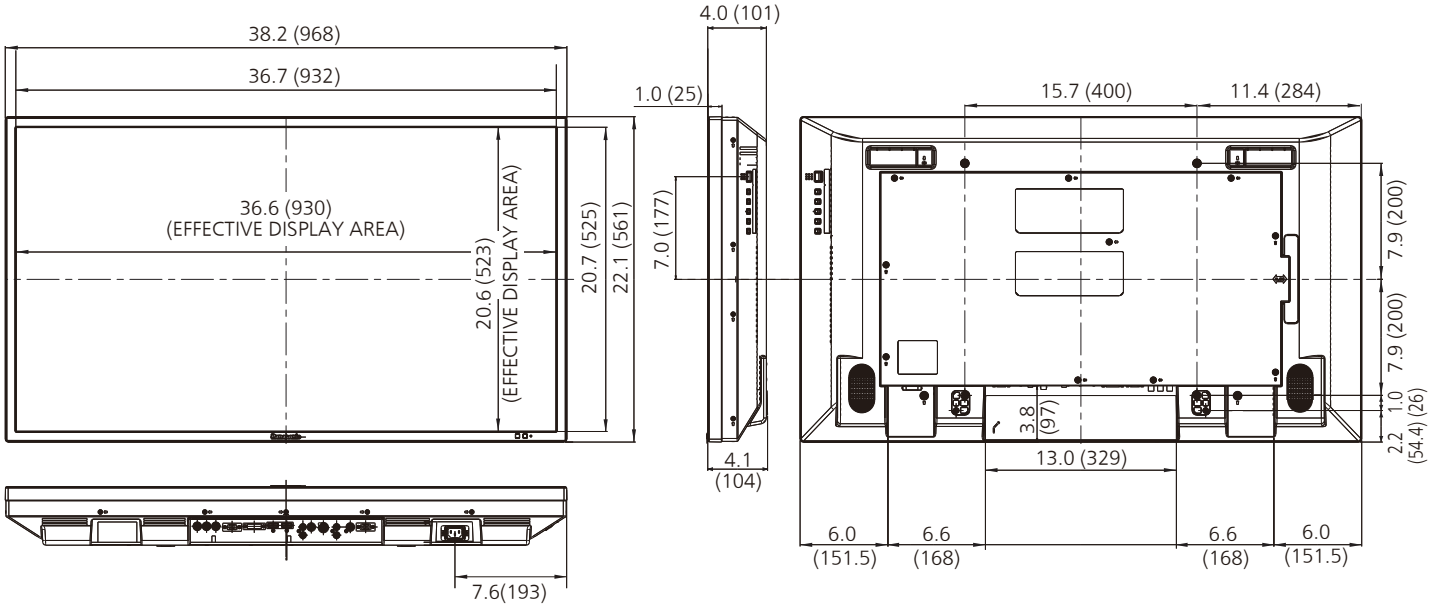
Multi-Screen System	2 x 2, 3 x 3, 4 x 4, 5 x 5 n x m (max 5 x 5)
Power-on Delay	Yes
Seam Hides Video Off Mode	Yes
Digital Zoom	x2, x3, x4
1:1 Pixel mode	Yes
Automatic Picture Position	Yes
Screen Saver	Yes
Power Management	PC input compatible
Power Save Mode	Yes
Auto Power Off	Yes
Standby Power Save Mode	Yes
Brightness sensor	Yes
Input lock	Yes
Button lock	Yes
Maximum volume level	Yes
Remote user level	Yes

OPTIONAL ACCESSORIES

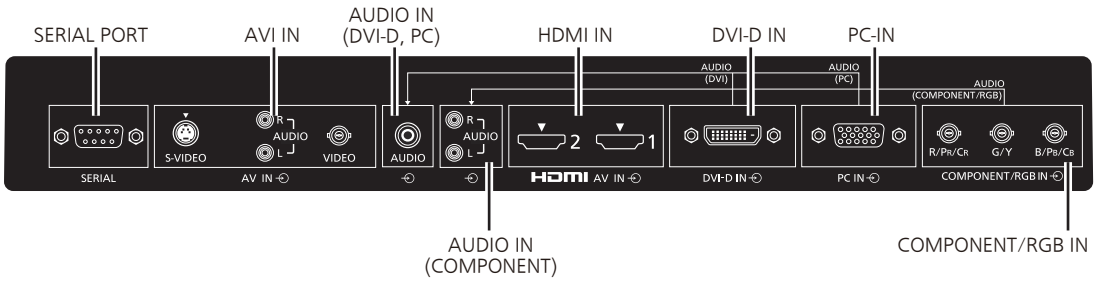
Pedestal	TY-STLF20

DIMENSIONS

Cautions: This drawing is not a scale
Units : inches (mm)



CONNECTION TERMINAL



© Panasonic Corporation 2011

APPLICABLE INPUT SIGNALS

	Signal name	Horizontal frequency (kHz)	Vertical frequency (kHz)	VIDEO S-VIDEO	COMPONENT IN (Dotclock(MHz))	RGB IN (Dotclock(MHz))	PC IN (Dotclock(MHz))	DVI-D IN (Dotclock(MHz))	HDMI1 HDMI2
Video Signals	NTSC	15.73	59.94	Y					
	PAL	15.63	50.00	Y					
	PAL60	15.73	59.94	Y					
	SECAM	15.63	50.00	Y					
	NTSC 4.43	15.73	59.94	Y					
	PAL M	15.73	59.94	Y					
	PAL N	15.63	50.00	Y					
Component Signals	525(480)/60i	15.73	59.94		Y (13.5)			Y (27.0)	
	525(480)/60p	31.47	59.94		Y (27.0)			Y (27.0)	Y
	625(575)/50i	15.63	50.00		Y (13.5)				
	625(576)/50i	15.63	50.00					Y (27.0)	Y
	625(575)/50p	31.25	50.00		Y (27.0)				Y
	625(576)/50p	31.25	50.00					Y (27.0)	Y
	750(720)/60p	45.00	60.00		Y (74.25)			Y (74.25)	Y
	750(720)/50p	37.50	50.00		Y (74.25)			Y (74.25)	Y
	1125(1080)/60p	67.50	60.00		Y (148.5)*1			Y (148.5)	Y
	1125(1080)/60i	33.75	60.00		Y (74.25)*1			Y (74.25)	Y
	1125(1080)/50p	56.25	50.00		Y (148.5)*1			Y (148.5)	Y
	1125(1080)/50i	28.13	50.00		Y (74.25)*1			Y (74.25)	Y
	1125(1080)/24sF	27.00	48.00		Y (74.25)*2				
	1125(1080)/30p	33.75	30.00		Y (74.25)*1			Y (74.25)	Y
	1125(1080)/25p	28.13	25.00		Y (74.25)*1			Y (74.25)	Y
	1125(1080)/24p	27.00	24.00		Y (74.25)*1			Y (74.25)	Y
PC Signals	640x400@70Hz	31.46	70.07			Y (25.17)	Y (25.17)	Y (25.17)	
	640x400@85Hz	37.86	85.08			Y (31.5)	Y (31.5)	Y (31.5)	
	640x480@60Hz	31.43	59.88			Y (25.15)	Y (25.15)	Y (25.15)	
	640x480@60Hz	31.47	59.94			Y (25.18)	Y (25.18)	Y (25.18)	Y
	640x480@67Hz	35.00	66.67			Y (30.24)	Y (30.24)	Y (30.24)	
	640x480@72Hz	37.86	72.81			Y (31.5)	Y (31.5)	Y (31.5)	
	640x480@75Hz	37.50	75.00			Y (31.5)	Y (31.5)	Y (31.5)	
	640x480@85Hz	43.27	85.01			Y (36.0)	Y (36.0)	Y (36.0)	
	720x400@70Hz	31.47	70.08			Y (28.32)	Y (28.32)	Y (28.32)	
	800x600@55Hz	34.50	55.38			Y (35.33)	Y (35.33)	Y (35.33)	
	800x600@56Hz	35.16	56.25			Y (36.0)	Y (36.0)	Y (36.0)	
	800x600@60Hz	37.88	60.32			Y (40.0)	Y (40.0)	Y (40.0)	Y
	800x600@60Hz	38.00	60.51			Y (40.13)	Y (40.13)	Y (40.13)	
	800x600@72Hz	48.08	72.19			Y (50.0)	Y (50.0)	Y (50.0)	
	800x600@75Hz	46.88	75.00			Y (49.5)	Y (49.5)	Y (49.5)	
	800x600@85Hz	53.67	85.06			Y (56.25)	Y (56.25)	Y (56.25)	
	852x480@60Hz	31.47	59.94			Y (33.54)	Y (33.54)	Y (34.24)	
	1024x768@50Hz	39.55	50.00			Y (51.89)	Y (51.89)	Y (51.89)	
	1024x768@60Hz	48.36	60.00			Y (65.0)	Y (65.0)	Y (65.0)	Y
	1024x768@60Hz	48.50	60.02			Y (64.99)	Y (64.99)	Y (65.18)	
	1024x768@70Hz	56.48	70.07			Y (75.0)	Y (75.0)	Y (75.0)	
	1024x768@75Hz	60.24	74.93			Y (80.0)	Y (80.0)	Y (80.0)	
	1024x768@75Hz	60.02	75.03			Y (78.75)	Y (78.75)	Y (78.75)	
	1024x768@75Hz	61.01	75.70			Y (80.05)	Y (80.05)	Y (81.0)	
	1024x768@85Hz	68.68	85.00			Y (94.5)	Y (94.5)	Y (94.5)	
	1024x768@120Hz	97.55	119.99				Y (115.5)	Y (115.5)	
	1066x600@60Hz	37.64	59.94			Y (53.0)	Y (53.0)	Y (53.0)	
	1152x864@60Hz	53.70	60.00			Y (81.62)	Y (81.62)	Y (81.62)	
	1152x864@75Hz	67.50	75.00			Y (108.0)	Y (108.0)	Y (108.0)	
	1152x900@65Hz	61.20	65.20			Y (92.0)	Y (92.0)	Y (92.0)	
	1152x900@66Hz	61.85	66.00			Y (94.5)	Y (94.5)	Y (94.5)	
	1152x900@75Hz	71.40	75.60			Y (105.1)	Y (105.1)	Y (105.1)	
	1280x768@60Hz	47.78	59.87			Y (79.50)	Y (79.50)	Y (79.50)	
	1280x800@50Hz	41.20	50.00			Y (68.55)	Y (68.55)	Y (68.55)	
	1280x960@60Hz	60.00	60.00			Y (108.0)	Y (108.0)	Y (108.0)	
	1280x960@85Hz	85.94	85.00			Y (148.5)	Y (148.5)	Y (148.5)	
	1280x1024@50Hz	52.70	50.00			Y (89.38)	Y (89.38)	Y (89.38)	
	1280x1024@60Hz	63.34	59.98			Y (108.18)	Y (108.18)	Y (108.18)	
	1280x1024@60Hz	63.90	60.00			Y (107.35)	Y (107.35)	Y (107.35)	
	1280x1024@60Hz	63.37	60.01			Y (107.5)	Y (107.5)	Y (107.5)	
	1280x1024@60Hz	63.74	60.02			Y (108.1)	Y (108.1)	Y (108.1)	
	1280x1024@60Hz	63.98	60.02			Y (108.0)	Y (108.0)	Y (108.0)	Y
	1280x1024@60Hz	63.79	60.18			Y (108.19)	Y (108.19)	Y (108.19)	
	1280x1024@66Hz	70.66	66.47			Y (119.84)	Y (119.84)	Y (119.84)	
	1280x1024@75Hz	79.98	75.02			Y (135.0)	Y (135.0)	Y (135.0)	
	1280x1024@76Hz	81.13	76.11			Y (135.0)	Y (135.0)	Y (135.0)	
	1280x1024@85Hz	91.15	85.02				Y (157.5)	Y (157.5)	
	1360x768@60Hz	47.71	60.02			Y (85.5)	Y (85.5)	Y (85.5)	
	1366x768@50Hz	39.55	50.00			Y (69.92)	Y (69.92)	Y (69.92)	
	1366x768@60Hz	48.36	60.00			Y (86.71)	Y (86.71)	Y (87.44)	
	1400x1050@60Hz	65.12	59.91			Y (121.38)	Y (121.38)	Y (122.43)	
	1400x1050@60Hz	65.32	59.98			Y (121.75)	Y (121.75)	Y (121.75)	
	1400x1050@60Hz	65.35	60.12			Y (121.81)	Y (121.81)	Y (121.85)	
	1400x1050@75Hz	82.28	74.87			Y (156.0)	Y (156.0)	Y (156.0)	
	1600x1200@60Hz	75.00	60.00			Y (162.0)	Y (162.0)	Y (162.0)	
	1920x1080@60Hz	67.50	60.00			Y (148.5)	Y (148.5)	Y (148.5)	
	1920x1200@60Hz	74.04	59.95				Y (154.0)	Y (154.0)	
	Macintosh13"(640x480)	35.00	66.67			Y (30.24)	Y (30.24)	Y (30.24)	
	MacintoshLC13"(640x480)	34.97	66.60			Y (31.33)	Y (31.33)	Y (31.33)	
	Macintosh16"(832x624)	49.72	74.55			Y (57.28)	Y (57.28)	Y (57.28)	
	Macintosh19"(1024x768)	60.24	75.08			Y (80.0)	Y (80.0)	Y (80.0)	
	Macintosh21"(1152x870)	68.68	75.06			Y (100.0)	Y (100.0)	Y (100.0)	
	Macintosh II(1280x1024)	80.00	75.00			Y (134.4)	Y (134.4)	Y (135.2)	

*1:Based on SMPTE 274M standard.
*2:Based on SMPTE RP211 standard.

© Panasonic Corporation 2011